

Application No: 10/550,769
Response to Non-final Office Action dated April 9, 2008
Amendment and Response dated June 27, 2008
Attorney Docket: 1557-4 PCT/US
Page 2

Amendments to the Claims:

This listing of claims will replace all prior versions and listings of claims in the subject application, and please amend the claims as follows:

Claim 1. (Currently amended): A nozzle for producing a flat spray pattern, the nozzle comprising a fluid liquid passageway terminating in a cross member having an end wall having an outlet aperture of fixed cross sectional area, the cross member defining fluid passageway having at least one two deflectors that converge towards the aperture to deflect[[s]] the fluid liquid towards the aperture to produce a flat spray pattern; and the cross member supporting at least one axially displaceable pin adapted to move across the aperture to decrease or increase the cross sectional area ~~adjustable means to vary the cross section~~ of the aperture.

Claims 2-4. (Canceled)

Claim 5. (Currently amended): The nozzle according to claim 1 [[4]], wherein means is provided to control the axial displacement of the pin[[s]].

Claim 6. (Currently amended): The nozzle according to claim 5 [[4]], wherein in adjusting the cross section of the aperture ~~the two axially displaceable~~ pins move the same distance in opposing directions.

Claim 7. (Currently amended): The nozzle according to claim 1 [[4]], wherein the fluid liquid passageway and cross member are circular.

Claim 8. (Currently amended): The nozzle according to claim 7, wherein the diameter of the fluid liquid passageway is the same as the diameter of the cross member.

Application No: 10/550,769
Response to Non-final Office Action dated April 9, 2008
Amendment and Response dated June 27, 2008
Attorney Docket: 1557-4 PCT/US
Page 3

Claim 9. (Currently amended): The nozzle according to claim 6 [[1]], wherein each pin is coupled to an internally threaded block, a shaft being in threaded engagement with each block whereby rotation of the shaft causes movement of the blocks to displace the pins in opposite axial directions.

Claim 10. (Currently amended): A nozzle for producing a flat spray pattern, the nozzle comprising a T-piece, the leg of which is a pipe defining a fluid liquid passageway and the head of the T-piece being a pipe positioned across the end of the fluid liquid passageway, an aperture of fixed cross sectional area is positioned in the head of the T-piece axially aligned with the fluid liquid passageway, the head pipe defining two deflectors that converge towards the aperture to produce a flat spray pattern, and a pin terminating in a planar end face is positioned at each end of the head of the T-piece to be displaceable along the T-piece so that the end faces of the pin can move across the aperture to vary the cross sectional area of the aperture.

Claim 11. (Original): The nozzle according to claim 10, wherein the pins are in screw threaded engagement with the head of the T-piece so that axial displacement of the pins across the aperture is effected by rotation of the pins.

Claim 12. (Withdrawn - currently amended): Snowmaking equipment comprising at least one nozzle according to claim 1 for producing a flat spray pattern, the nozzle comprising a water passageway terminating in a cross member having an end wall having an outlet aperture of fixed cross sectional area, the cross member defining at least two deflectors that converge towards the aperture to deflect the water towards the aperture to produce a flat spray pattern; and the cross member supporting at least one axially displaceable pin adapted to move across the aperture to decrease or increase the cross

Application No: 10/550,769
Response to Non-final Office Action dated April 9, 2008
Amendment and Response dated June 27, 2008
Attorney Docket: 1557-4 PCT/US
Page 4

sectional area of the aperture, the nozzle being inclined upwardly to, in use, project a plume of water droplets, the nozzle being positioned adjacent a jet of compressed air, the variation in the cross sectional area of the aperture reflecting the characteristics of the plume.

Claim 13. (Canceled)

Claim 14. (Withdrawn): The snowmaking equipment according to claim 12, wherein the jet of compressed air is placed downstream of the nozzle.

Claim 15. (Withdrawn): The snowmaking equipment according to claim 14, wherein the jet of compressed air comprises an array of apertures.

Claim 16. (Withdrawn): The snowmaking equipment according to claim 15, wherein the width of the jet equates to the width of the plume of the water droplets.

Claim 17. (Withdrawn): The snowmaking equipment according to claim 12, wherein the plume of water droplets escaping from the nozzle is directed tangentially against the underside of the air jet.

Claim 18. (Withdrawn): The snowmaking equipment according to claim 12, wherein four flat jet water nozzles are positioned spaced apart in a horizontal plane, the spacing of the nozzles equating to the maximum width of each plume.

Claim 19. (Withdrawn): The snowmaking equipment according to claim 12 wherein the water nozzle, nozzles and jet or jets of compressed air are supported on a head, the head being pivotally inclined to a self standing mast.

Application No: 10/550,769
Response to Non-final Office Action dated April 9, 2008
Amendment and Response dated June 27, 2008
Attorney Docket: 1557-4 PCT/US
Page 5

Claim 20. (Withdrawn): The snowmaking equipment according to claim 19 wherein the mast is rotatable about a vertical axis.

Claim 21. (Withdrawn): The snowmaking equipment according to claim 19, wherein the head is vertically adjustable relative to the mast whilst maintain the angle of inclination of the water nozzle and air jet.

Claim 22. (Withdrawn): The snowmaking equipment according to claim 19, wherein the head includes four nozzles spaced so that the plumes meet at their widest points.

Claims. 23-24 (Canceled)